Helping to Meet the Nation's Chemical Measurements Needs

Technical Highlights of the Analytical Chemistry Division of NIST

MISSION

To:

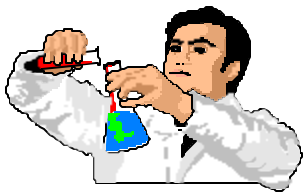
- conduct research concerning the qualitative and quantitative determination of chemical composition;
- develop and maintain state-of-the-art chemical analysis capabilities;
- provide measurement quality assurance through reference materials, data, and services;
- provide a basis for U.S. chemical measurement traceability and international comparability

VISION

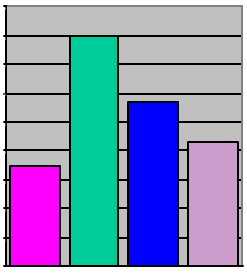
To be *recognized* as the nation's reference laboratory for chemical metrology and compositional analysis by providing traceability through measurement technology, reference materials, data, and services required to meet future science and technology needs

Technical Expertise in

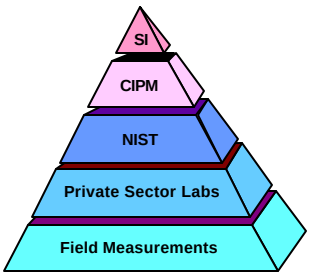
- Analytical Mass Spectrometry
- Analytical Separation Science
- Atomic and Molecular Spectroscopy
- Chemical Sensing Technology
- Classical and Electroanalytical Methods
- Gas Metrology
- Nuclear Analytical Methods
- Microanalytical Technologies
- Laboratory Automation and System Integration Technology



Research in Chemical Measurement Science



Critical Analytical Data and Specialty Analyses



Tools for Achieving National Traceability and International Comparability of Chemical Measurements

- Standard Reference Materials
- NIST Traceable Reference Materials
- Measurement Proficiency Assessment for Selected U.S. Environmental, Health, and Industrial Studies
- Key International Comparisons

The Analytical Chemistry Division provides these infrastructural capabilities to address national concerns including:

- **U.S. industry's productivity and competitiveness**
- **equity in trade**
- **environmental quality**
- **public health and safety**